

ABSTRACT

The present invention provides a biomimetic odor sensor that utilizes neither an oxide semiconductor nor a quartz oscillator, is hardly affected by the atmospheric moisture, simple in structure, inexpensive in production cost, fast in reaction rate, of a wet type, and provided with the condition close to the condition of the nasal mucosa of the human olfactus organ. The sensor 10 according to the present invention includes a mixed material 12 in which β -carotene and a reducing agent to prevent the oxidation of the β -carotene are dispersed in a viscous liquid, and a cathode electrode 16 and an anode electrode 18 are disposed so as to be in contact with the mixed material 12.